PATENT CLAIMS

1. Method for treating liquids, comprising the steps of
   - irradiating a flow of air and a flow of the liquid to be treated at the same time in order to create ozone in both the air and the liquid,
   - mixing the ozone-containing air with the liquid to be treated up-streams the liquid irradiating point,
   - irradiating the flow of liquid containing the in-mixed ozone in order to break down the ozone in the liquid for producing free radicals.

2. Method according to claim 1, comprising the further step of exposing the fluid to at least one catalyst at the same time as the ozone is broken down for increasing the amount of free radicals.

3. Method according to claim 1 or 2, wherein the UV radiation which is emitted for breaking down the ozone and contaminants has a wavelength of 245 nm - 400 nm.

4. Method according to Claim 3, wherein the UV radiation which is emitted for breaking down the ozone has a wavelength of 254 nm.

5. Method according to any of the preceding claims, wherein the mixing is obtained by an ejector effect into the flow of liquid.

6. Apparatus for treatment of liquid according to claim 1, comprising a container having an inlet and an outlet for the liquid to be treated, UV generating light source capable of irradiating the inside of the container, air guidance means arranged inside the container, connected to an air source and an inlet conduit for the liquid to be treated via a mixing means.

7. Apparatus according to claim 6, wherein said air guidance means comprises a compartment divided from the inside of the container by a quartz glass and that said UV light radiating means is arranged in or adjacent said compartment.

8. Apparatus according to claim 6, wherein substantially the whole of the inner surface is arranged with a catalyst.

9. Apparatus according to claim 8, wherein the catalyst comprises titanium dioxide.

10. Apparatus according to any of the preceding claims 6-9, wherein the mixing means comprises a throttle on the inlet, which throttle is capable of creating an ejector effect of the air/ozone into the flow of liquid.

11. Apparatus for treating liquids, and in particular water, according to claim 6, further including through-flowing means provided with inlets and outlets for the liquid, UV-light generating means arranged in the through-flowing means, capable of generating ozone in the through-flowing liquid and at the same time break down the ozone in order to produce free radicals, characterised in that mountable and demountable connection means are arranged to the inlet and outlet of the through-flowing means.

12. System according to claim 11, characterised in that it is arranged with at least two through-flowing means.

13. System according to claim 12, characterised in that said through-flowing means are arranged in series, whereby the first through-flowing means is connected to an inlet pipe for liquid to

be treated and that the last through-flowing means is connected to an outlet pipe for the treated liquid.

14. System according to any of the claims 12-13, characterised in that at least two of the said through flowing means are connected in parallel to an inlet pipe for liquid to be treated and an outlet pipe for the treated liquid.

15. System according to any of the preceding claims 11-14, characterised in that the through-flowing means is designed as an elongated pipe.

16. System according to claim 15, characterised in that the UV-light generating means is arranged in one end of the elongated pipe.

17. System according to any of the preceding claims 11-16, characterised in that ceramics is arranged on the inside of the through-flowing means at least adjacent said UV-generating means.

18. System according to claim 17, characterised that the ceramics is titanium oxides.

19. System according to any of the claims 11, 15-18, characterised in that the through-flowing means is arranged adjacent a water outlet for human use, like a shower head.

20. System according to claim 19, characterised in that the through-flowing means is arranged between a water faucet and the water outlet.

21. System according to claim 19, characterised in that the through-flowing means is arranged between a warm water pipe and a faucet connected to the water outlet.